

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
29 September 2005 (29.09.2005)

PCT

(10) International Publication Number
WO 2005/090986 A2

(51) International Patent Classification⁷: **G01N 33/548**,
33/66

[IT/IT]; Chiron Vaccines, Via Fiorentina, 1, I-53100 Siena
(IT).

(21) International Application Number:
PCT/IB2005/000987

(74) Agents: **MARSHALL, Cameron, John et al.**; Carpmaels
& Ransford, 43-45 Bloomsbury Square, London WC1A
2RA (GB).

(22) International Filing Date: 17 March 2005 (17.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0406013.3 17 March 2004 (17.03.2004) GB

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW.

(71) Applicant (for all designated States except US): **CHIRON**
SRL [IT/IT]; Via Fiorentina, 1, I-53100 Siena (IT).

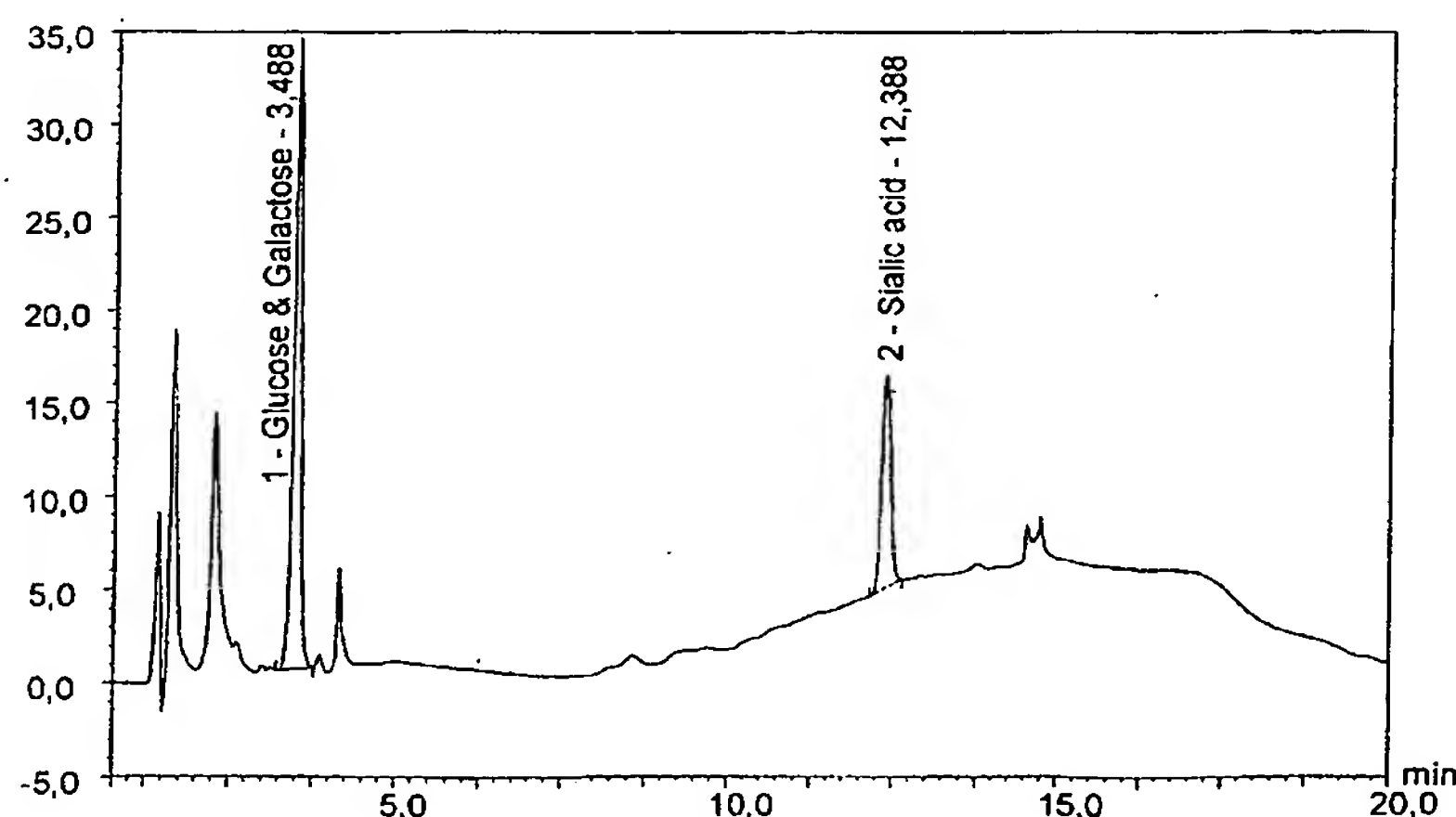
(72) Inventors; and

(75) Inventors/Applicants (for US only): **BARDOTTI, An-**
gela [IT/IT]; Chiron Vaccines, Via Fiorentina, 1, I-53100
Siena (IT). **PROIETTI, Daniela** [IT/IT]; Chiron Vaccines,
Via Fiorentina, 1, I-53100 Siena (IT). **RICCI, Stefano**

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,

[Continued on next page]

(54) Title: ANALYSIS OF SACCHARIDE VACCINES WITHOUT INTERFERENCE



(57) Abstract: The invention is based on methods that allow analysis of mixed meningococcal saccharides from multiple serogroups even though they share monosaccharide units. With a combination of saccharides from serogroups C, W135 and Y, the invention analyses sialic acid, glucose and galactose content. The glucose and galactose results are used to directly quantify saccharides from serogroups Y and W135, respectively, and the combined glucose and galactose content is subtracted from the sialic acid content to quantify saccharides from serogroup C. The three serogroups can thus be resolved even though their monosaccharide contents overlap. The three different monosaccharide analyses can be performed on the same material, without interference between the monosaccharides and without interference from any other saccharide materials in the composition (e.g. lyophilisation stabilisers). The method can be used to analyse total and free saccharide in conjugate vaccines and simplifies quality control of vaccines containing capsular saccharides from multiple serogroups.



SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *without international search report and to be republished upon receipt of that report*